Wollo University

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College of Informatics (COI)
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At Department of Software Engineering/Informatics

Title: - Hotel Management System for Habesha Hotel

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Contents

1.1 Introduction

Our project is concerned on Habesha Hotel management system Hotel is a commercial establishment providing, lodging, meals and other guest services. In general, to be called a hotel, this is a Project work undertaken in context of giving solution to the problems of hotel management system. Despite the legacy of the hotel, its system is still manual. The main purpose of our exercise is to perform each Employee's activity in computerized way rather than manually which is time consuming and profitable in many circumstances. We have tried to design the software in such a way that user may not have any difficulty in using this package & further expansion is possible without much effort. Even though we cannot claim that these will solve the Hotel's problem perfectly, but it will minimize the problems as much as possible.

The new system will provide safe and easily accessible management of customer files, give the right information to customers on time, and leaves comfortable environment for maintenance and further expansions.

1.2. Background/ Overview

Habesha hotel is one of the famous tourist hotels located in Addis Ababa Ethiopia. Its history extends fifty years. Most of the tourists visits Ethiopia choose Habesha Hotel due to several reasons such as the hospitality is very admirable, it has nice fresh view in all the four directions, comparably customers are asked to pay fair payment. All the rooms have shower (both hot and cold), mini fridge, wireless internet service, telephone in room dinning. At the present about fifty employees are working attached to several departments of the hotel. Both local and foreign guests reserve rooms, conduct meetings, celebrate cocktail parties, weddings, and many more other functions in the hotel.

The hotel management system we are going to implement will be covering all the basic process done in the hotel; it will handle

- Guest detail and reservation detail
- Room management service
- Staff management
- Inventory management service

1.3 Statement of the problem

Habesha hotel is presently using a manual system in their data processing; this involves the use of people, pens and paper in records keeping. The method of data processing reveals a number of problems, from those:

- It is difficult to search or identify whether a wanted room is available or not
- Records to be kept in the hotel are often too large, diversified and complex.
- Information can be lost when records are stolen, misplaced or vandalized.
- Inaccuracies often ensure from human error in manual record keeping.
- The difficulties of training replacement and substitute staff.
- Time wasting in both services and office management.
- Customer must come physically to report problem. This is boring and time consuming process.
- The System records documents on papers as result it needs more storage place and resources and it is difficult to manage properly.
- Guests are made to contend with time wastage involved coming to the hotel in order to make reservations.

1.4. Objective of the project

The project has both general and specific objectives here are the general objective and then Specific objectives.

1.4.1. General objective

The general objective of this project is to automate a computerized hotel management system for Habesha Hotel. That can straight forward and seek to ensure we run a professional, profitable and ethical company, building relationships with customers, suppliers and investors, driving business at Habesha Hotel and developing the business as a whole.

1.4.2 Specific objective

To achieve the specified general objective, the following specific objectives are stated:

- Identifying and understanding the problem area for the system
- Planning how to construct or develop the aimed system
- Propose the solution for the problem domain
- Reviewing how the current system works and operates.
- Identifying work efficiency of the existing system
- Develop the new system by Object Oriented Process
- Identify functional and nonfunctional requirements for the new systems.
- To improve and standardize practicing of efficient and effective communication skills in the hotel.
- Forward recommendation about system implementation, direction and guidelines.
- To replace the error prone manual system with the use of computerized system for accuracy.
- The computerized system will work with great speed making clerical work at front office much faster than the manual system.
- Finally implement and test the new system.

1.5 Project Scope and Limitation

The scope of this project is building or designing workable easy to operate and reliable software and Hotels with the available resources. However, it involves the total automation of managerial and office system in the use of better management practice. This includes the full automation of the system as only alternative selected.

This project is focused on the following points:

- Online Booking of rooms
- Online Book reservation
- Online managing of available and taken rooms
- Online request services.
- Online information giving and feedback.
- Online access of list of regular customers.
- Online computing the bill.
- Generate daily report to the authorized person

The main limitation of the project is:

- Does not supports multiple language and currencies
- The system does not detect spy or hacking attempts
- The system doesn't refund money
- Customer doesn't get instant email notification for everything, like their current amount of bill.

1.6 Methodology

The purpose of the methodology is to give an experienced investigator to get enough information to replicate the study. For conducting our project we will use the following methodologies.

1.6.1. Data collection method

- Observation: - To understand directly how the existing system works currently, we have used observation. We observed customer interaction with maintenance office.
- Interviewing: - Most analysts use interviewing as a primary way of gathering requirement in information system projects. We have used interview to gather facts, opinions, and truths of users about the current system
- Document analysis: - Using this method the team will try to analyze written documents in the organization which have importance to the project. This include the organization mission strategy, sample business forms, reports procedure manuals, Business rules, and documentation of existing systems, if any document view.

1.6.2 Development tools

1.6.2.1 Hardware requirement

Hardware tools;-

- PC (personal computer)
- HP laptop RAM-4GB, CPU-3.3 GHZ, system type 64 bit, storage capacity – 1TB
- Dell computer RAM-4GB, CPU-3.3GHz, System type-64bit, storage capacity – 560GB
- SanDisk Flash disk – 16 GB
- Tecno Mobile w3
- CD and DVD
- Printer (only for printing)
- Network cables

1.6.2.2 Software requirement

Software tools: -

- Microsoft word 13
- Adobe Reader
- NetBeans
- Enterprise architect
- Balsamiq Mockups 3
- Windows 10 operating system
- Window 8 operating system

1.6.3 System analysis and design methodology

For the system analysis and design part there are two models. Those are structured and object oriented. The team decides to use object –oriented methodology because of the flowing reasons:

- It is known by the group members.
- Easier to maintenance.
- Ease of understanding object-oriented models due to a consistent underlying representation throughout the development process.
- Ease of modification and extensibility of object-oriented models.

No separation between data and process unlike that of structured analysis methodology that treats data and process on the data separately.

1.7 Feasibility Report

The feasibility is to determine quickly and has minimum expense how to solve the problem and determine how the problem is solved. The system has to be tested for feasibility in the following ways.

1.7.1. Economic feasibility

The proposed system will reduce the cost when it is compared to the office that the maintenance system spends to work on because the system will use new technology innovations and computerized ideas which will require low cost expenses. Also this project requires minimum amount of cost for deployment process that will be low when it is compared to the previous manual system that the maintenance system uses early. The purpose of the economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide. There are two cases for benefit analysis such as tangible and intangible as well as software cost benefit and hard ware cost. The following are the tangible and intangible benefits and we will identify in this project.

A. Tangible benefit: - are those our project benefit that can convert into monetary values. For this project, we would identify the following tangible benefits.

- Reduction of paper and pen.
- Reduction of space needed to record data.
- Increased speed of service.

B. Intangible benefits: are those our project benefit that cannot convert into monetary values.

- Knowledge gain by project developer.
- Increasing the competitiveness of the individual
- Improved productivity
- Improving the morale of our team.
- Faster decision making on the team member
- Facilitating information processing of our team
- Increased customer satisfaction
- Improvement in service quality
- Improved accuracy of operation

A. Hardware cost

Item	Quantity	Price
Toshiba laptop	1	13,l00
HP laptop	2	17,000
Tecno W3	1	4500
SanDisk 16 GB	2	480
Dell computer (used)	1	14,000
Printer	1	2000
Networking devices	3	50
Total	11	49030

B. Software cost

Item	Price
Microsoft window 8	50
Microsoft window 10	80
Microsoft word 2013	60
Balsamiq mockups	40
Enterprise architect	90
Total	320

1.7.2. Technical Feasibility

Since the system uses easy hardware and software specifications for deployment processes it can be feasible in technical issues. So that the required person to operate and use the system is not expected to be professional. Anyone who has basic computer knowledge can use the system easily.

1.7.3. Operational Feasibility

Now a day the previous manual working environment does not satisfy customers and not comfortable for employees. But when the proposed system is implemented customers will get fast and reliable services and information as they want. Since the feature database management system will have user friendly interface and back-end system. So that it is technically feasible to implement this system.

1.7.4. Schedule Feasibility

It describes to estimate how long the system will take to develop and it can complete in a given time period It expresses communication plan of our project. We meet five times per a week. We contact to our advisor once per a week. It will tell in what time to perform the task of each activity and length or duration time of the project. It is determining start and finish month for project activity.

1.8 Significance of the project

- System gives fast service to the customer
- It increases the efficiency in the operation of Habesha hotel.
- to provide management with up to the minute report and analysis
- It involves the total automation of managerial and office system in the use of better management practices.
- Helps to avoid incorrect placement of record data.
- Unauthorized person will be out of service
- Reduce the loss of documents & human resource.

- Avoid data redundancy, which means extended data can be retrieved without affecting other data.
- To support customer application system.
- To facilitate report generation.
- To allow manager to view reports.

1.9 Beneficiary of the Project

- Staff Members:-
    - Can get service easily
    - Save their time
    - Reduce workers load
    - Decrease errors in information access of the manual system

- Employees:-
    - Saving their time and work loads
    - Reduce complexity
    - Easily access information from organized and centralized database.
- Group members:-
    - The project has initiated our team to get knowledge of how to develop hotel management system.
    - While struggling with some difficulties, the team got a lot of experiences of solving problems.

1.10 Team configuration management

It describes the task of the group member from this project.

No	NAME	Management issue
1.	Wallegn Workie	(In all activity) Requirements, design, coding, project team leader
2.	Abel Tilahun	(In all activity) Requirements, design, coding, project team member
3.	Yamlak Gebrie	(In all activity) Requirements, design, coding, project team member
4.	Mikiyas Tefera	(In all activity) Requirements, design, coding, project team member
5.	Adenen Alie	(In all activity) Requirements, design, coding, project team member
6	Samule Dejen	(In all activity) Requirements, design, coding, project team member
7	Robel Mahmed	(In all activity) Requirements, design, coding, project team member

1.11 Organization of the project

This project has five parts:

1. Chapter one contains introduction of the project and proposal. It includes background, statement of problem, objective, Scope of the project, methodology, feasibility of the project, significance of the project and Organization of the project.
2. Chapter two contains introduction part, existing system, supplementary requirements, constraints, software requirement specification (SRS) under SRS there are a functional and nonfunctional requirements, Actors of the system, system use case diagram, use case documentation,
3. This is chapter four that contains Implementation of the project, coding of the project, and testing: that the way we used for our project.
4. The last one is chapter five is that is concerned with conclusion and recommendation about our project.

Chapter Two: System analysis

2.1 Introduction

An important part in the software developments is to explore requirement for your system. A process of collecting and interpreting facts identifying the problems and decomposition of a system in to its components, System analysis is conducted for the purpose of studying a system or its parts order in order to identify its objectives. It is a problem solving technique that improves the system and ensures that all the components of the system work efficiently to accomplish their purpose.

2.2.1 Existing system descriptions

The existing system description describes the current system of the organization as it is. Generally the hotel management is running manually. The system uses paper work and direct human language communication by mouth to manage the hotel. This kind of hotel management requires more storage for handling data and files of customers as well as files of employees which is often difficult to maintain this files safe. This delays information transmission in the hotel.

This could be described the activities they perform, how they handle information, and the draw backs of the system.

2.2.2 Existing system problem:

- It is complete manual system
- Due to manual process, it requires more time for completion of any work.
- In this system availability of a wanted room status have to be checked manually thorough the registers.
- Each and every entry has to be search manually via register.
- The existing system requires more storage for saving files

2.2.3 Actors of existing system

- Actors are users that interact with a system. An actor can be a person, an organization, or an outside system that interacts with your application or system. They must be external objects that produce or consume data.
- Therefore actors of the existing system are :-

- Manager:-A person who manages all the activities going in the hotel.
- Officer:-A person that serves different services to customer and generate report to manager.
- Accountant: - A person financial aspects of the hotel.
- Customer:-A person who needs and uses different service and products of the hotel.
- Visitor: -A person that visits the all activates given by the hotel online system. Example: website…
- System administrator: - Direct User of the system that performs critical actions like add rooms, delete rooms, update rooms for customers that are on the web who wants to use hotel.

2.2.4 Supplementary Requirements

2.2.4.1 Business rule

These are rules used by the organization (the hotel) currently for managing different activities in the hotel. The business rules maximize the profit of the hotel as they serve as a guideline and regulation for all the activities to be held out in the system. These rules include the following;

- Rooms cannot be assigned to more than one room reservation in the same time frame.
- Only certain employees are allowed to input room reservations into the system.
- There is no debit service for un regular customers.
- If a customer has reserved a room for consecutive 45 days he/she will get 17% discount.
- If a regular customer make a request for a debit service he/she must know that there will be 10% charge fee.

- If a customer abuses or damages any property of the hotel he/she will be asked to pay the equivalent payment otherwise the hotel will ask he/she by the law of the constitution.

2.2.4.2 Constraints

Constraint means anything that challenges to do our project properly. Constraints can be economic, political, technical, or environmental and pertain to your project resources, schedule, target environment, or to the system itself. The following are some examples of the:

- Communication problems , such as language
- The unavailability of a data source (such as shortage of internet connection) on time may extend the project completion time.
- Damage on the computer that we work on, it is managed by using backup.
- Shortage of time: We managed such problem by using additional time from our rest time.
- Virus can attack our project, we used updated antivirus to manage this problem.

2.3.1 Software Requirement Specification (SRS)

A requirement is a feature that the system must have or constraint that is must satisfy to be accepted by the hotel system. Once the requirement analysis is done the next step is to clearly define and document the product requirement and get them approved from the customer or the market analysis, this is done through an SRS (Software requirement specification) documents which consists of all the project requirements to be design and developed during the project life cycle.

2.3.1.2 Functional Requirements

Functional requirements describe the relations between the system and the user or the environment. Here the 'relations' means the direct or indirect interactions between the user and the system. Hence the system has the following stakeholders with different requirements

S/N	Requirements	Priority
1	The system allows the user to register in to the system	High
2	The system allows the user to login in to the system	High
3	The system allows the user view profile the system	High
4	The system allows the user to receive incoming message	High
5	The system allows the user to send message	High
6	The system allows the user to search information in the system	High
7	The system allow the admin to view users list in the system	Low
8	The system allows the admin to remove bad words	Low
9	The system allows the user to update his/her profile	Low
10	The system allows the user to make payment	High

Table 2.1 functional requirement

2.3.1.4 Non Functional Requirements

Non-Functional requirement explains and describes requirements that support the main of the system that should have but they are not part of the system functionalities. Generally nonfunctional requirements describe the quality of the system. The following lists states the non-functional requirements. It is external behavior of the system

The following table is show the some nonfunctional requirements of the system

Req. ID	Requirements	Category
R1	The system shall be available during normal hotel operating hours.	Availability
R2	The extent to which the hotel management system is safe from outside, non-allowed user or attack. The system does not allow unauthorized users to login.	Security
R3	The client should have a valid e-mail account in order to receive reservation e-mail notifications.	Other non-functional requirements
R4	The acceptable response times for system functionality. The system is expected to serve large number of concurrent user requests.	Performance
R5	The system shall run in any Microsoft Window environments. The system supports every operating system.	Portability
R6	Mean time between failures and mean time to recovery. And the system doesn't failure at all.	Reliability
R7	The system shall be simple for usage or access by both officers and customers.	Usability

R8	The system must support commonly usable browsers.	Flexibility
R9	The system operates in the shortest time with the least amount of resources.	Efficiency

Table 2.2 nonfunctional requirements

2.3.1.5 Use case Description

This is a sequential illustration of the actions performed by each use case. This contains precondition, post condition, main course of actions, and alternate course of action as it is shown in the following table:

Section	Purpose	
Author	Abel Tilahun	
Use case no	UC 1	
Name	Login	
Description	The user enters authorized username and password in order to access the system.	
Precondition	The user should have username and password.	
Post condition	The main page of the system is displayed, that gives alternatives of services to customers ,officer and accountant	
Basic course of action	User action	System response
	1. The user opens the 'login' page. 3. The user enters the username and password on the form. 4. The user clicks the login button. 8. End use case.	2. The system will display a 'login' form that accepts username and password from the user. 5. The system searches the username from the database and matches it with the password. 6. If correct the system opens the authorized page.

Alternate course of action	The username/password is invalid	

Table 2.3 Use case documentation for login

Section	Purpose	
Author	Mikiyas Tefera	
Use case no	UC 2	
Name	View comment	
Description	The manager will view comments sent from customers.	
Precondition	There should be a comment sent from the customer.	
Post condition	The manager will get the comments comes from the customers.	
Basic course of action	User action	System response
	1. The manager login to the system. 2. The manager opens the 'view comments' page. 4. The manager selects and reads comments. 5. End use case.	3. The system will display a page contains the list of comments sent from customers.
Alternate course of action	Send e-mail notification if there is account problem	

Table 2.4 view comment (manager) Use case documentation

Section	Purpose	
Author	Wallegn Workie	
Use case no	UC 3	
Name	Visit website(view hotel profile)	
Description	The customer visits the hotel profile on its official website.	
Precondition	The customer should have internet access or connection.	
Post condition	The customer will be visited.	
Basic course of action	User action	System response
	1. The user opens a web browser. 2. The user enters the hotels official websites address on the browser' address bar. 4. End use case.	3. The browser displays the hotels profile on the webpage.
Alternate course of action	----------	

Table 2.5 visit website (view hotel profile) Use case documentation

Section	Purpose	
Author	Adnan Ali	
Use case no	UC 4	
Name	Logout	
Description	When the user logouts when he/she wants to exit from the system.	
Precondition	The user should login first	
Post condition	The user will get the logout page	
Basic course of action	User action	System response
	1. The user clicks the logout button. 3. End use case.	2. The system will display the login form for the user.
Alternate course of action	----------	

Table 2.6 logout use case documentation

Section	Purpose	
Author	Samuel Dejen	
Use case no	UC 5	
Name	Register	
Description	The customer register online	
Precondition	The customer should have internet access or connection	
Post condition	The wanted room will be booked or cancelled.	
Basic course of action	User action	System response
	1. The customer opens the home page. 2. The customer opens the Register membership page. 3. The customer files all the field required 5. The Customer Clicks the register button 9.End use case	4. The system will display a register form that contain the following -First name -Last name -Address -Sex -Age -User Name -Password 6. The system checks all the form fields have filled correctly. 7. If the form filled correctly the system display successfully register message.
Alternate course of action	If the form is not filled correctly, the system will display to try again the filling form correctly.	

Table 2.7 use case documentation for register

Section	Purpose	
Author	Yamlak Gebre	
Use case no	UC 6	
Name	Add room	
Description	The system administrator will add new room with new attributes to the system.	
Precondition	The system administrator should will perform the filling forms.	
Post condition	The system will display the ‘add room’ form with fields such as: Room name, Room type, Room price.	
Basic course of action	User action	System response
	1. The system administrator will login to the system. 2. The system administrator will open the ‘add room’ page. 4. The system administrator will fill the form. 8. End of use case.	3. The system will display the ‘add room’ form with fields such as: - Room name. - Room type. -Room price. 5. The system will check all fields of the form are filled or not. 6. If all fields are filled correct show successful message.
Alternate course of action	If the form is not filled correctly the system will display message to fill the forms correctly.	

Table 2.8 use case documentation to add room

Section	Purpose	
Name	Search customer information	
Author	Mikiyas Tefera	
Use case no	UC 7	
Description:	The receptionist searches the customer's information that reserves a room in the hotel.	
Precondition	A customer should reserve a room.	
Post condition	The receptionist opens the 'search customer' page.	
Basic course of action	User action	System response
	1. The receptionist login to the system. 2. The receptionist opens the 'search customer' page. 4. The receptionist enters the customers on the form. 5. The receptionist clicks the search button. 9. The receptionist clicks on the result information and view customer's information. 10. End use case.	3. The system will display a 'search customer' form that accepts the customer information to search. 6. The system checks for the customer's information on the database. 7. If the customer's information that the receptionist looking for is found the system displays the customer's information on the result box.
Alternative course of action	8. If the customer's information is not found go back to steps 3, 4, 5 and 6 of the basic course of action.	

Table 2.9 use case documentation for search customer information

Section	Purpose	
Name	Add employee	
Author	Abel Tilahun	
Use Case no	UC 8	
Pre-condition	The system must list down the requirements to add an employee	
Post condition	The system administrator will fill the form.	
Description:	The system administrator will add new room with new attributes to the system.	
Basic course of action	**User action**	**System response**
	1. The system administrator will login to the system. 2. The system administrator will open the 'add employees' page. 4. The system administrator will fill the form. 8. End of use case.	3. The system will display the 'add employees' form with fields such as: - Employee name. - Employee ID. -Employee salary. -Employee address. 5. The system will check all fields of the form are filled or not. 6. If all fields are filled correctly show successful message.
Alternative course of action	7. If the form is not filled correctly go to step 3, 4 and 5 of the basic course of action.	

Table 3.0 use case documentation for add employee

Section	Purpose	
Name	Update employee	
Use Case no	UC 9	
Actor	Abel Tilahun	
Description:	The system administrator updates the employee's information.	
Pre-condition	The system administrator must be have an information of the employee to be updated.	
Post condition	The system should updated or display employee information	
Basic course of action	User action	System response
	1. The system administrator will login to the system. 2. The system administrator will open the 'update employee' page. 4. The system administrator will enter the information of the employee to be updated. 8. The system admin selects the employee from the result box and click 'update information' button. 10. The system admin will change the employee's information. 11. The system admin will click save button. 14. End use case.	3. The system will display the 'update employee' form that helps the system admin to choose the employee to be updated. 5. The system searches for the employee that the system admin wants to update. 6. If the employee that the system admin wants to update is found the system displays the employee's information on the result box. 9. The system will display a form that contains the selected employee's information. 12. If all form fields filled correctly the system will display a successful message.
Alternative course of action	7. If the employee is not found go back to steps 3, 4 and 5 of the basic course of action. 13. If form not filled correctly go to step 9, 10 and 11 of the basic course of action.	

Table 3.1 use case documentation for update employee

Section	Purpose	
Name	Delete room	
Author	Abel Tilahun	
Use Case no	UC 10	
Description:	The system administrator will delete the room from the database.	
Pre-condition	The user must be reserve a room.	
Post condition	The system gets the full data base which the room is being delete.	
Basic course of action	User action	System response
	1. The system administrator will login to the system. 2. The system administrator will open the 'delete room' page. 4. The system administrator will enter the information of the room to be deleted. 7. The system admin selects the room from the result box and click delete button. 10. End use case.	3. The system will display the 'delete room' form that helps the system admin to choose the room to be deleted. 5. The system searches for the room that the system admin wants to delete. 6. If the room that the system admin wants to delete is found the system displays the room's information on the result box. 8. The system will delete the room from the rooms table. 9. The system will display a successful message.
Alternate course of the action	----------	----------

Table 3.2 use case documentation for delete room

2.4 System use case diagram

Use case diagram is a diagram that shows use case, actors, and their relationships. This use case diagram is a graphical depiction of the hotel interaction among the elements of hotel management system. And it represents the methodology used in system analysis and use case represents the interaction between the user and the system. Use case diagram shows a group of use cases, actors their associations, a system boundary box, and packages (optional).

Use case diagram is as shown in figure below

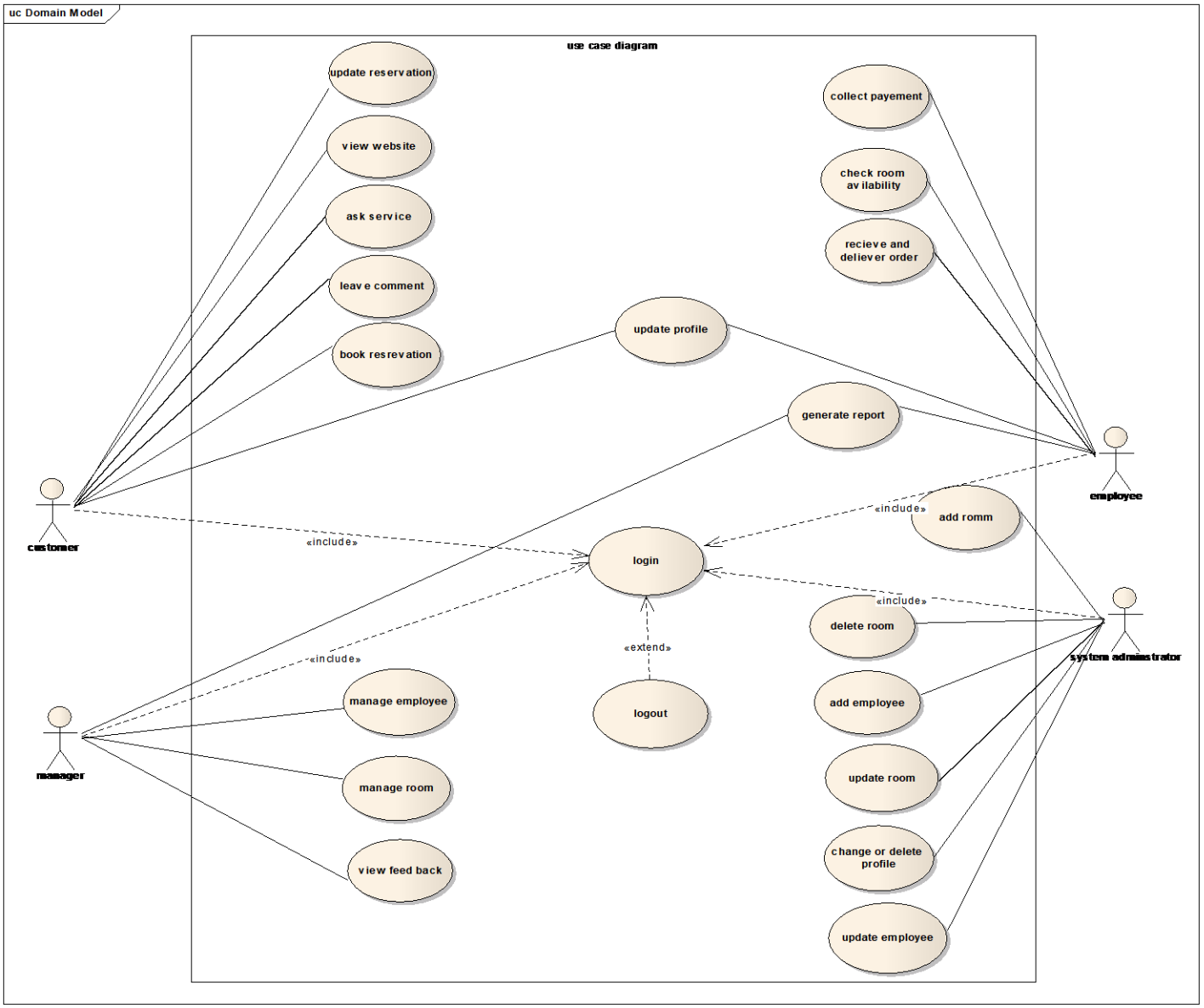

Figure 2.1 use case diagram

2.5 Class Modeling Diagram

Hotel management system class diagram describes the structure of a hotel management system classes, their attributes, operations (or methods), and the relationship among object. And it provides a wide variety of usages; from modeling the domain specific data structure to detailed design of the target system. With the share model facilities, you can reuse the class model in the interaction diagram for modeling the detailed design of the dynamic behavior. This diagram can be derived from one part of modeling is class responsibility collaboration (CRC).

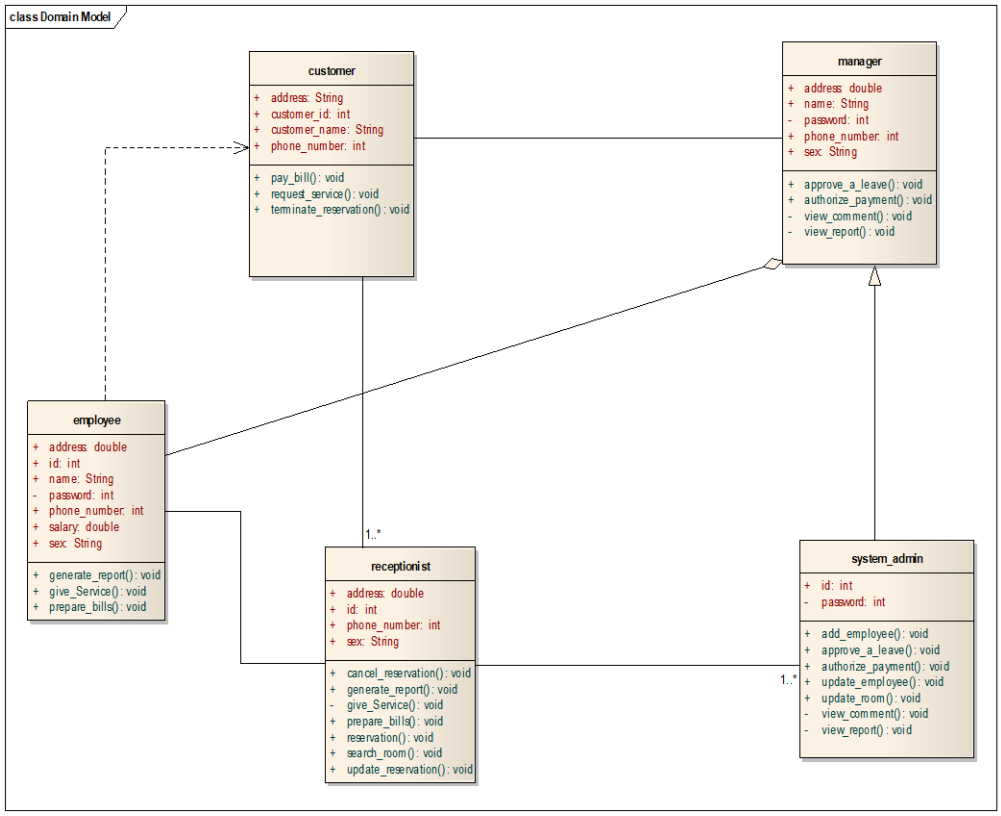

Fig 2.2 Class Diagram

2.6 Sequence diagram

Sequence diagram will prepared for each use case to show how different objects interact with each other to achieve the functionality of the use case.

- A sequence diagram models how show the classes of the object interact with each other over time as the system runs.
- Sequence diagrams are sometimes known as event diagrams or event scenarios.
- Sequence diagram play an important role for users to analyze and design system in sequentially flow of information.
- Sequence diagrams are a great ways to validate and flash out your logic.

As shown in figure below it contains: -

- Login page
- Registration page and reservation page
- Reservation page

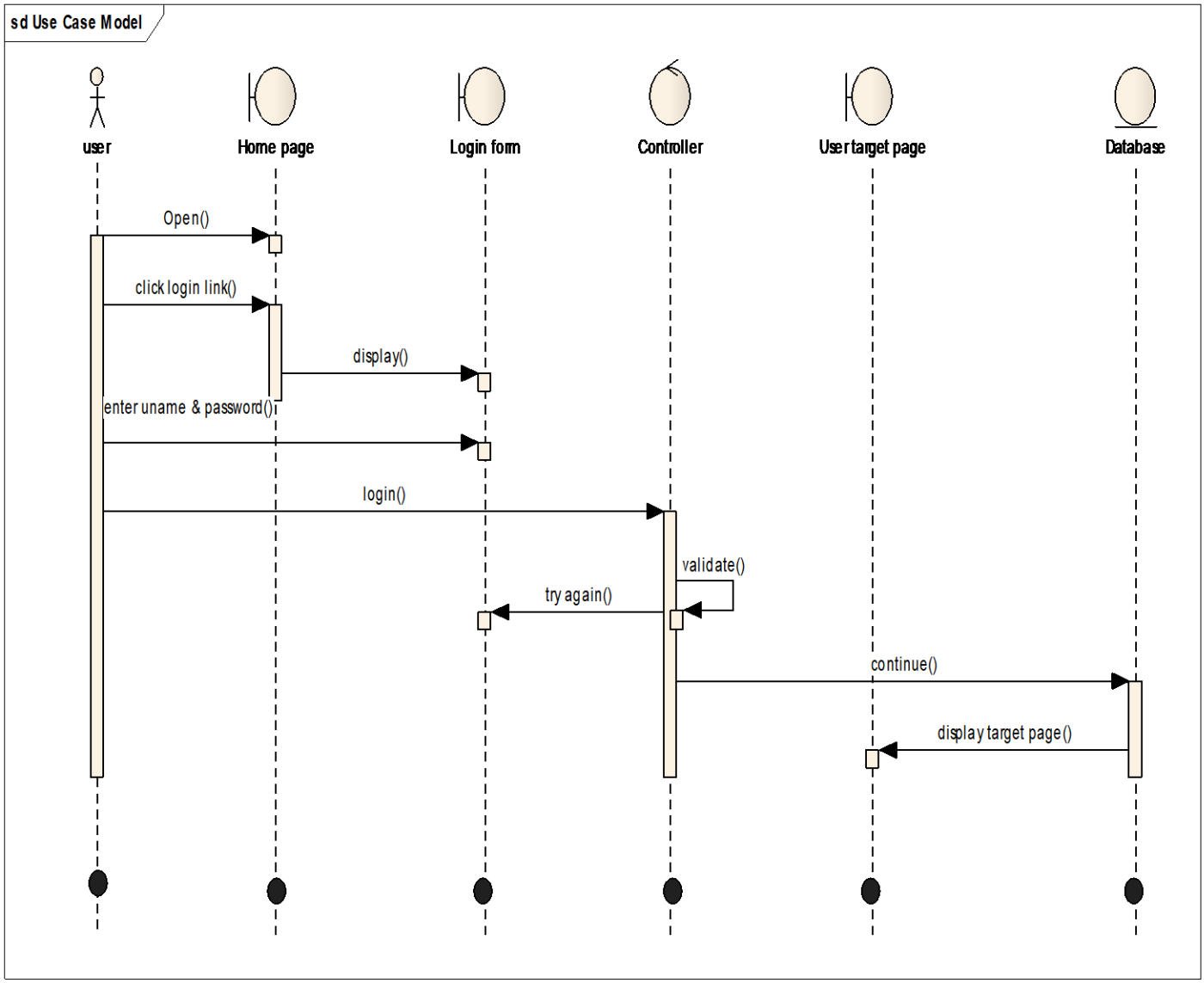

Figure 2.3 Sequence diagram for login page

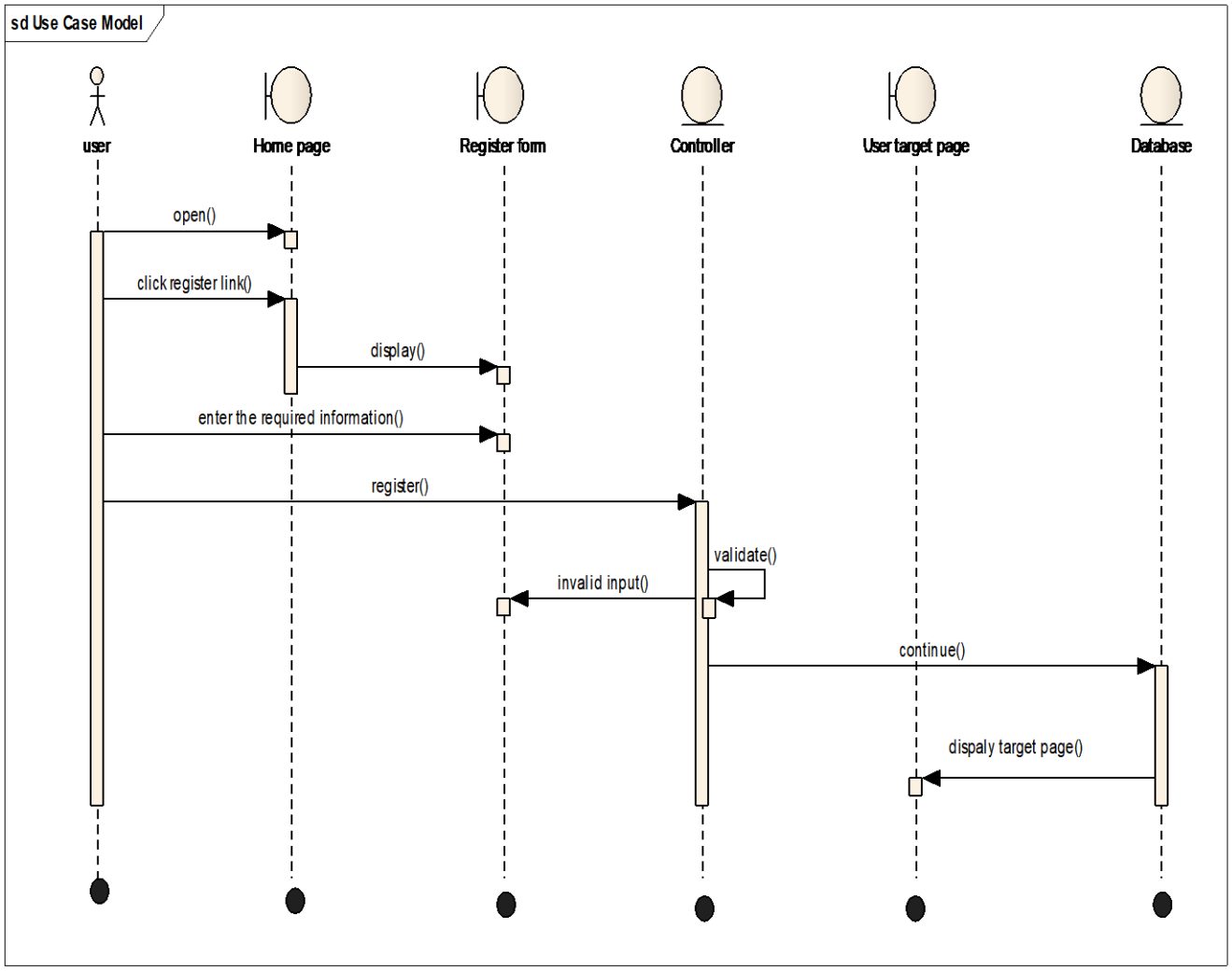

Table 2.4 Sequence diagram for register

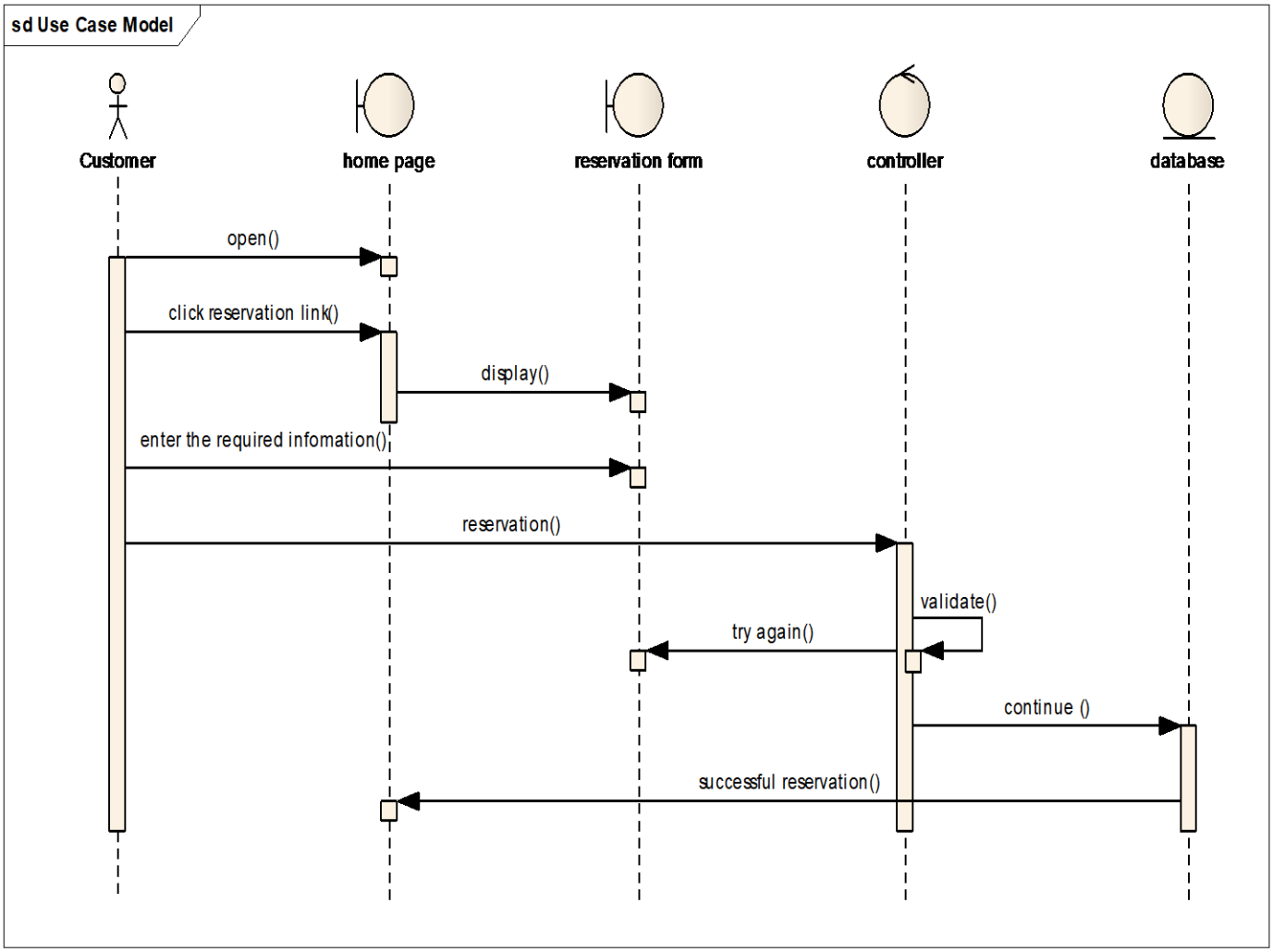

Figure 2.5 Sequence diagram for reservation

2.7 Activity diagram

An activity diagram is essential a flow chart, showing flow of control from activity to activity it involves.

- Modeling the sequential(and possibility concurrent) steps in a computational process
- Modeling the flow of an object as it moves from state to state at different points in the flow of control. There are an activity diagram as shown below: -

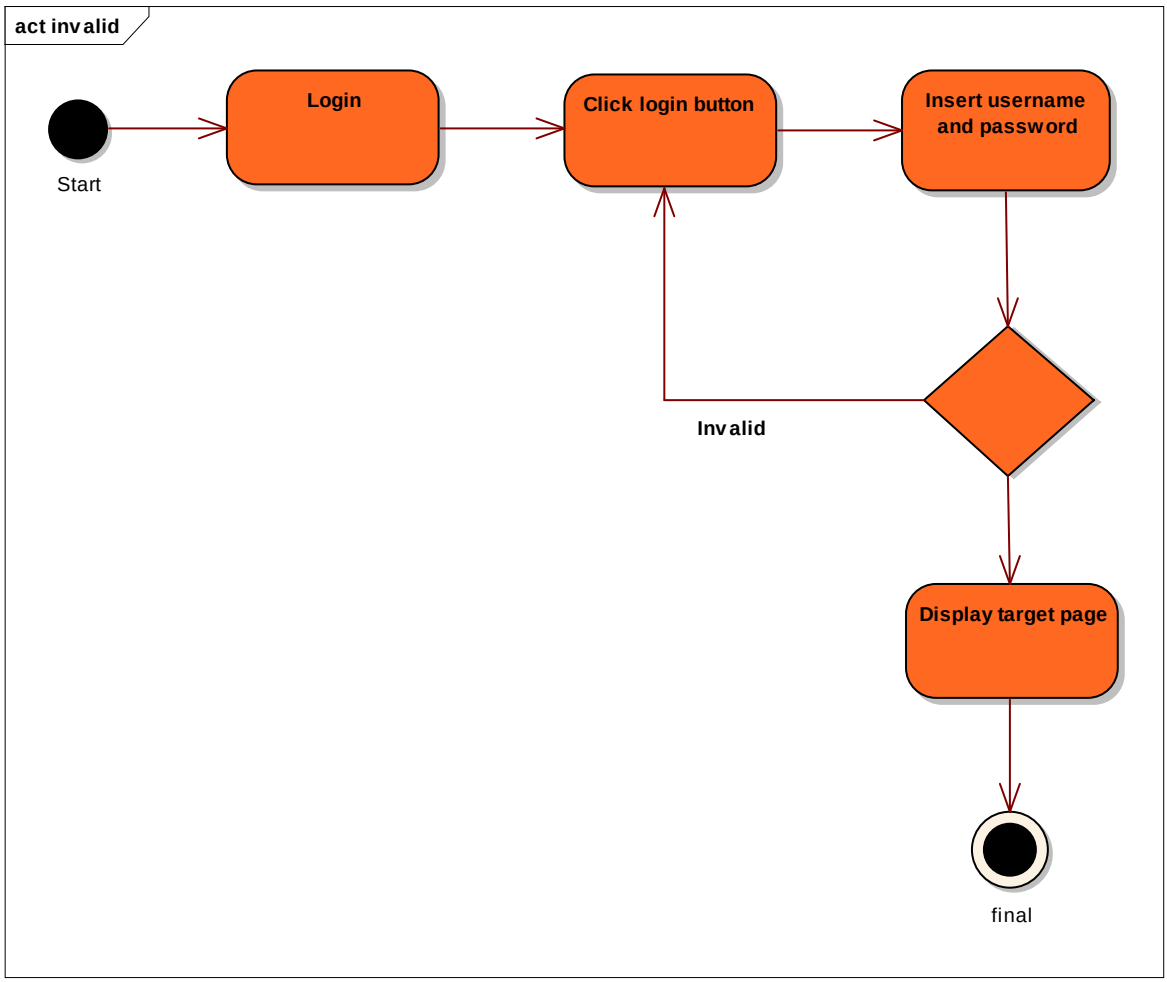

Figure2.6 Activity diagram for login page

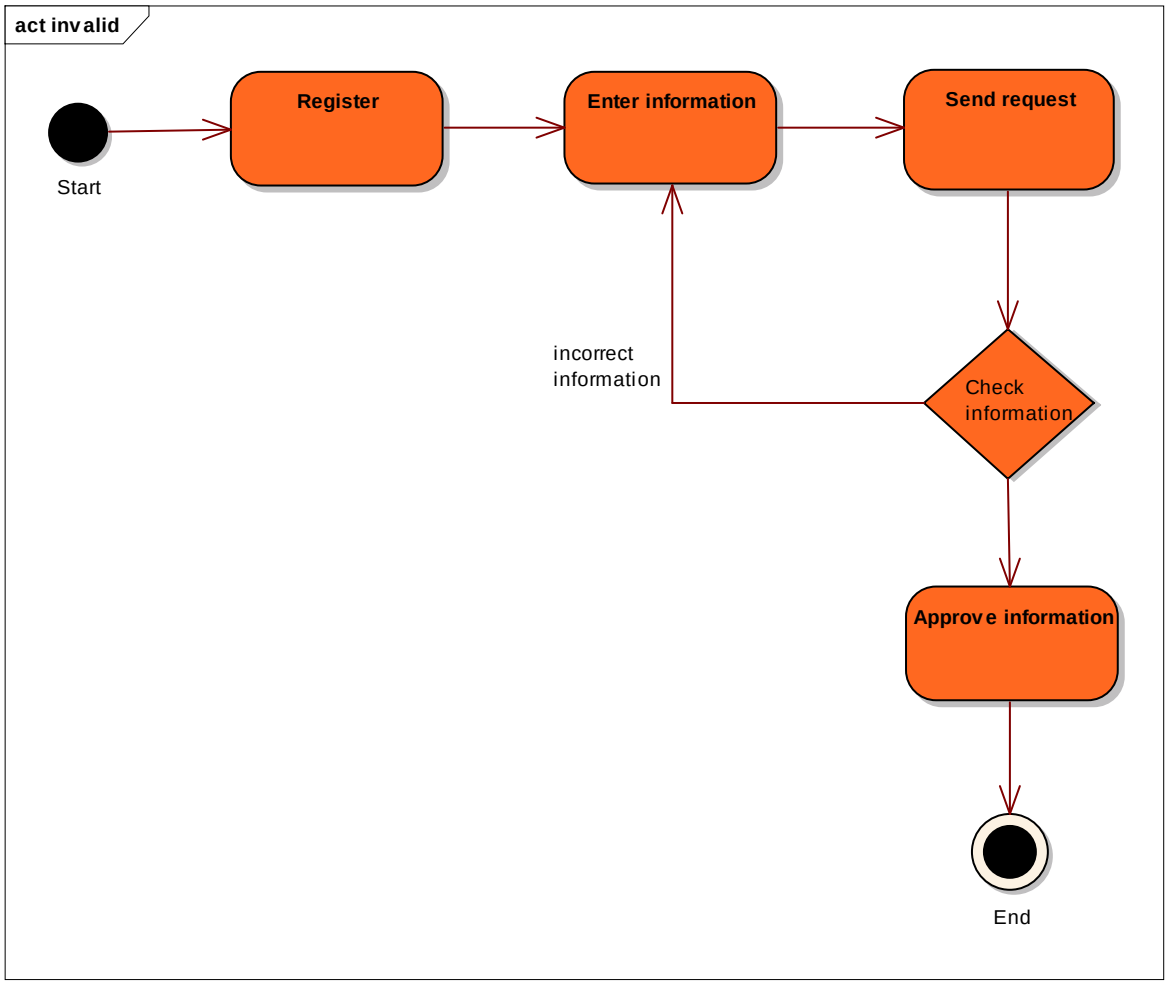

Figure 2.7 Activity diagram for request

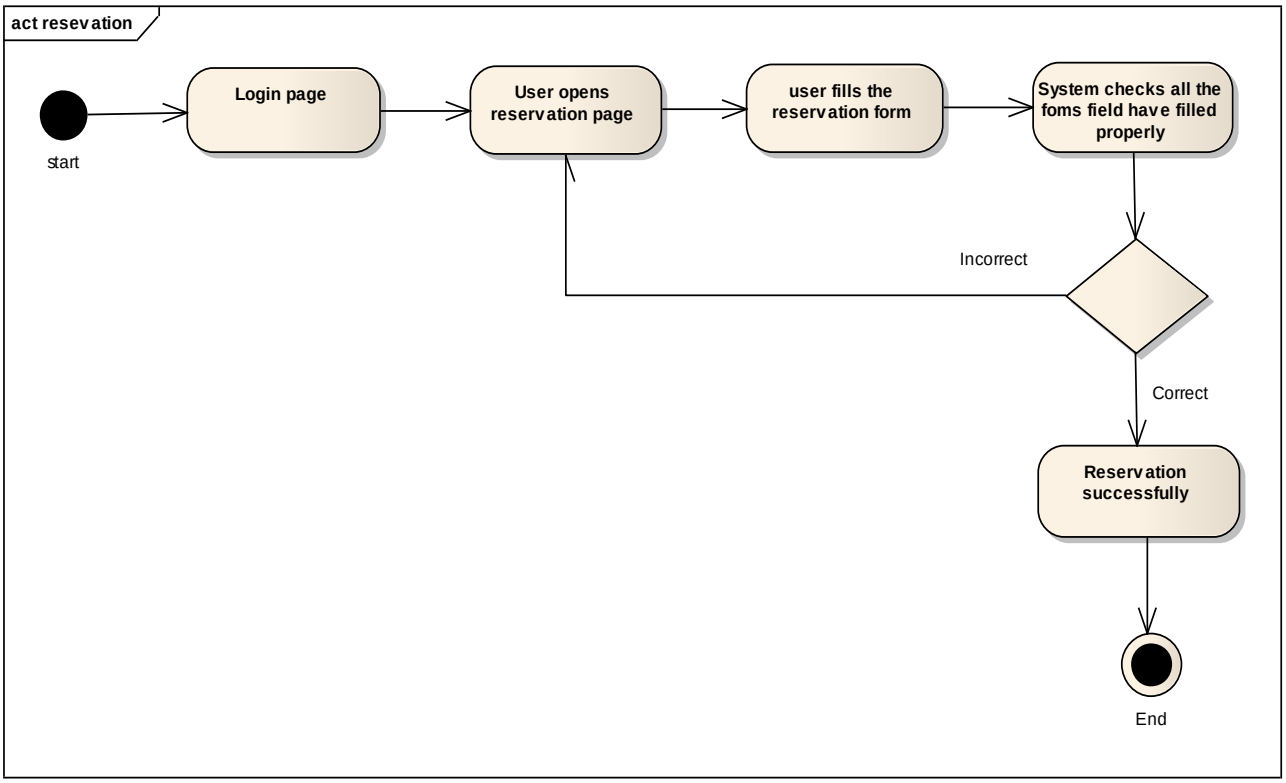

Figure 2.8 Activity diagram for reservation

Chapter 3

3.1 Implementation

Generated Code for customer

```
/**
 * @author $Bello
 * @version 1.0
 * @created 30-May-2019 3:42:39 AM
 */
public class customer {

   public String address;
   public int customer_id;
   public String customer_name;
   public int phone_number;
   public manager m_manager;

   public customer(){

   }

   public void finalize() throws Throwable {

   }

   public void pay_bill(){

   }
```

```
    public void request_service(){

    }

    public void terminate_reservation(){

    }

}
Generated code for employ


/**
 * @author $Bello
 * @version 1.0
 * @created 30-May-2019 3:42:39 AM
 */
public class employee {

    public double address;
    public int id;
    public String name;
    private int password;
    public int phone_number;
    public double salary;
    public String sex;
    public receptionist m_receptionist;

    public employee(){
```

```
    }

    public void finalize() throws Throwable {

    }

    public void generate_report(){

    }

    public void give_Service(){

    }

    public void prepare_bills(){

    }

}
```

Generated code for manager

```
/**
 * @author $Bello
 * @version 1.0
 * @created 30-May-2019 3:42:39 AM
 */
public class manager {

    public double address;
    public String name;
```

```
    private int password;
    public int phone_number;
    public String sex;
    public employee m_employee;

    public manager(){

    }

    public void finalize() throws Throwable {

    }

    public void approve_a_leave(){

    }

    public void authorize_payment(){

    }

    private void view_comment(){

    }

    private void view_report(){

    }

}
```

Generated code for receptionist

```
/**
 * @author $Bello
 * @version 1.0
 * @created 30-May-2019 3:42:39 AM
 */
public class receptionist {

   public double address;
   public int id;
   public int phone_number;
   public String sex;
   public customer m_customer;
   public system_admin m_system_admin;

   public receptionist(){

   }

   public void finalize() throws Throwable {

   }

   public void cancel_reservation(){

   }

   public void generate_report(){

   }
```

```
    private void give_Service(){

    }

    public void prepare_bills(){

    }

    public void reservation(){

    }

    public void search_room(){

    }

    public void update_reservation(){

    }

}
Generated code for room

/**
 * @author $Bello
 * @version 1.0
 * @created 30-May-2019 3:42:39 AM
 */
public class room {
```

```
    public String name;
    public int phone_number;
    public int room_number;

    public room(){

    }

    public void finalize() throws Throwable {

    }

}
Generated code for system_admin

/**
 * @author $Bello
 * @version 1.0
 * @created 30-May-2019 3:42:39 AM
 */
public class system_admin extends manager {

    public int id;
    private int password;

    public system_admin(){

    }

    public void finalize() throws Throwable {
        super.finalize();
```

```
    }

    public void add_employee(){

    }

    public void approve_a_leave(){

    }

    public void authorize_payment(){

    }

    public void update_employee(){

    }

    public void update_room(){

    }

    private void view_comment(){

    }

    private void view_report(){

    }

}
```

Chapter four

Conclusion and Recommendation

4.1 Conclusion

The conclusion of this project is a Hotel management system is a computerized management system. This system keeps the records of hardware assets besides software of this organization. The proposed system will keep a track of Workers, Residents, Accounts and generation of report regarding the present status. This project has GUI based software that will help in storing, updating and retrieving the information through various user-friendly menu-driven modules.

4.2 Recommendation

Conclusions and Recommendations

The project "Hotel Management System" is aimed to develop to maintain the day-to-day state of admission/Vacation of Residents, List of Workers, payment details etc.

Main objective of this project is to provide solution for hotel to manage most there work using computerized process. This software application will help admin to handle customer's information, room allocation details, payment details, billing information etc. Detailed explanation about modules and design are provided in project documentation. The existing system is a manually maintained system. All the Hotel records are to be maintained for the details of each customers, Fee details, Room Allocation, Attendance etc. All these details are entered and retrieved manually, because of this there are many disadvantages like Time Consuming, updating process, inaccuracy of data.

For avoiding this we introduced or proposed a new system in proposed system the computerized version of the existing system. Provides easy and quick access over the data.

The entire project has been developed and deployed as per the requirements stated by the User, it is found to be bug free as per the testing standards that are implemented. Any Specification untraced errors will be concentrated in the coming versions, which are planned to be developed in near future.

References

We have searched and looked for various and different informations from different postions, organizations, books ,websites …….. and etc.

From these references of information some of them are listed below

- Different lecture books
- Different peoples
- WWW.GOOGLE.COM
- WWW.YOUTUBE.COM
- WWW.HOWTO.COM
- Documents that the existing system have been using